

Fig.1

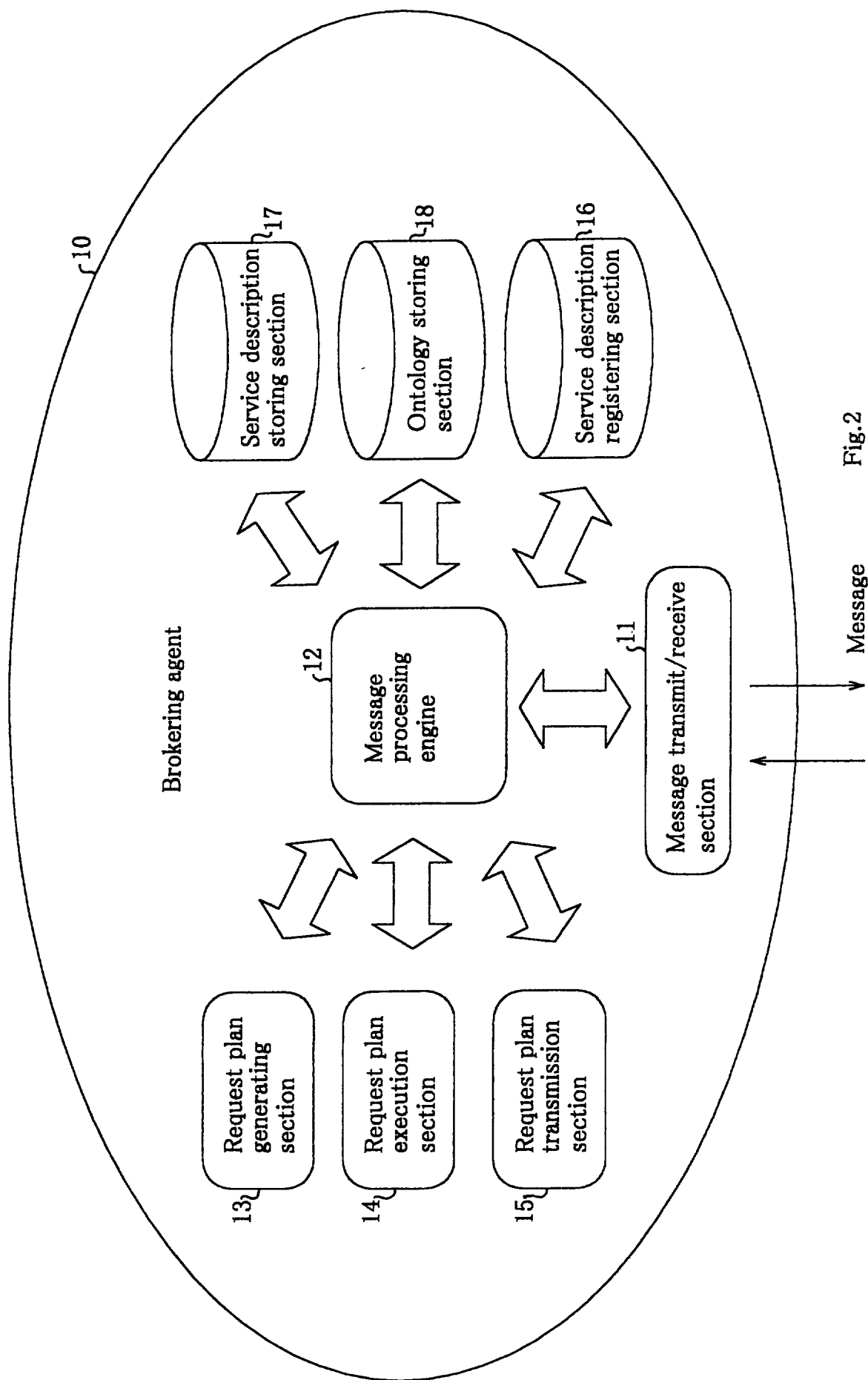


Fig.2

2025-03-14 14:00:00

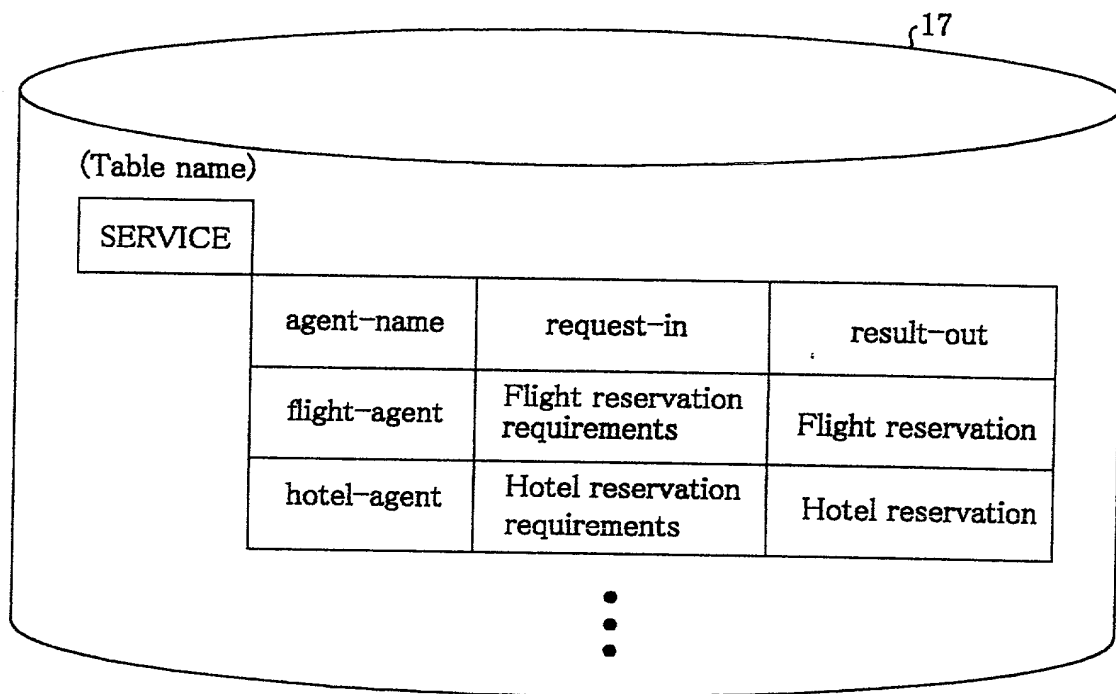


Fig.3

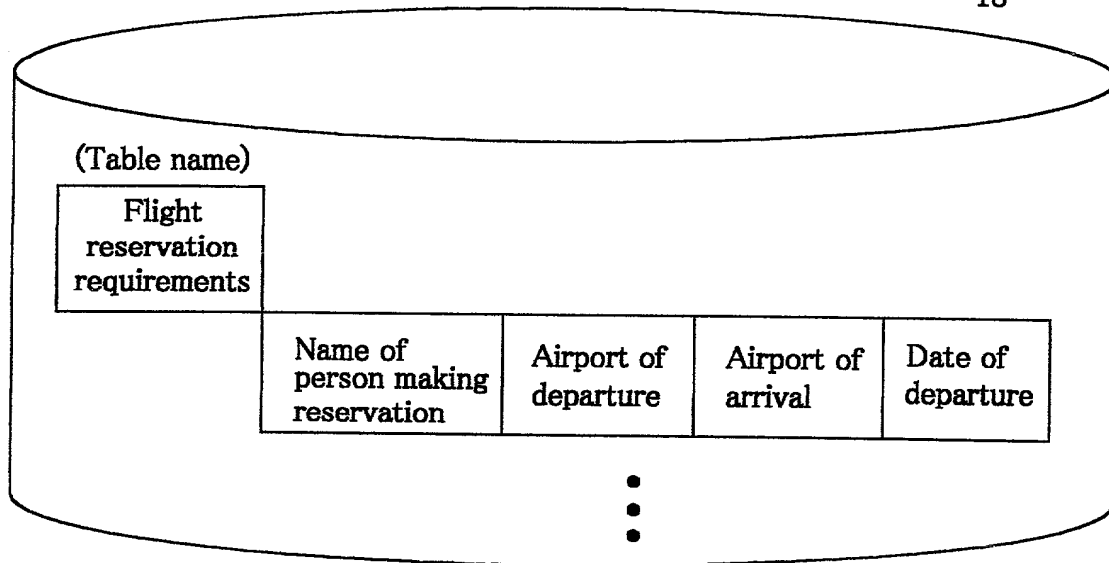


Fig.4

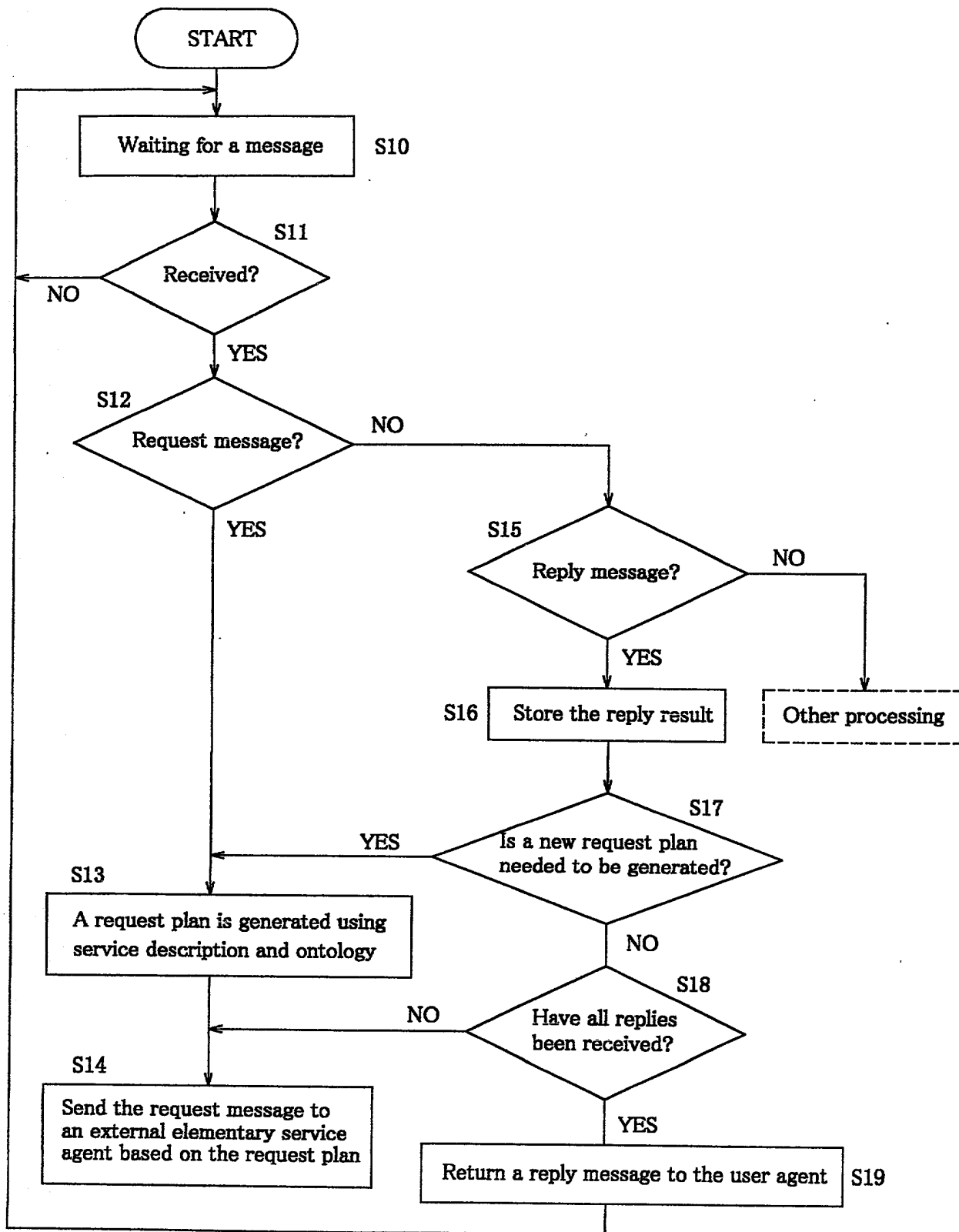


Fig.5

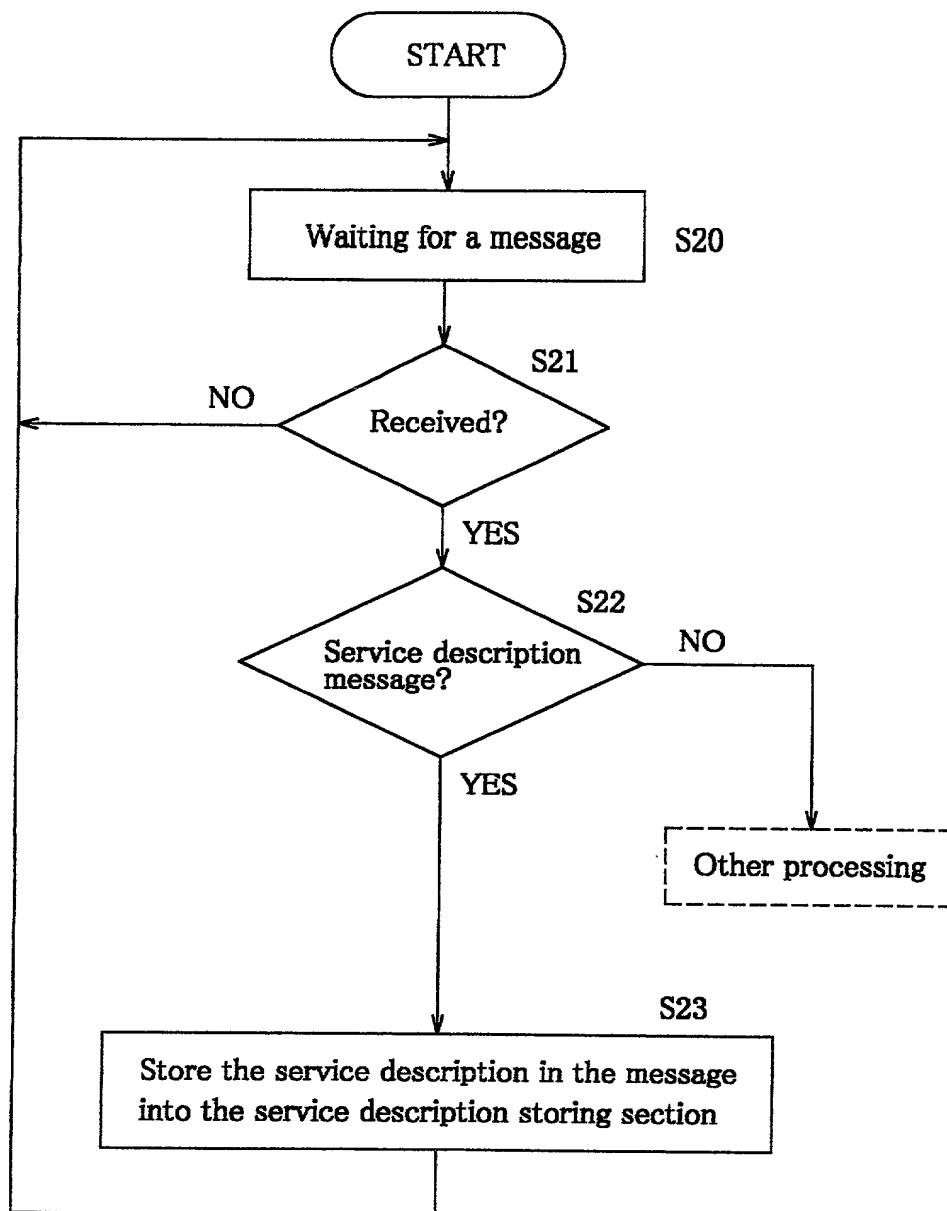


Fig.6

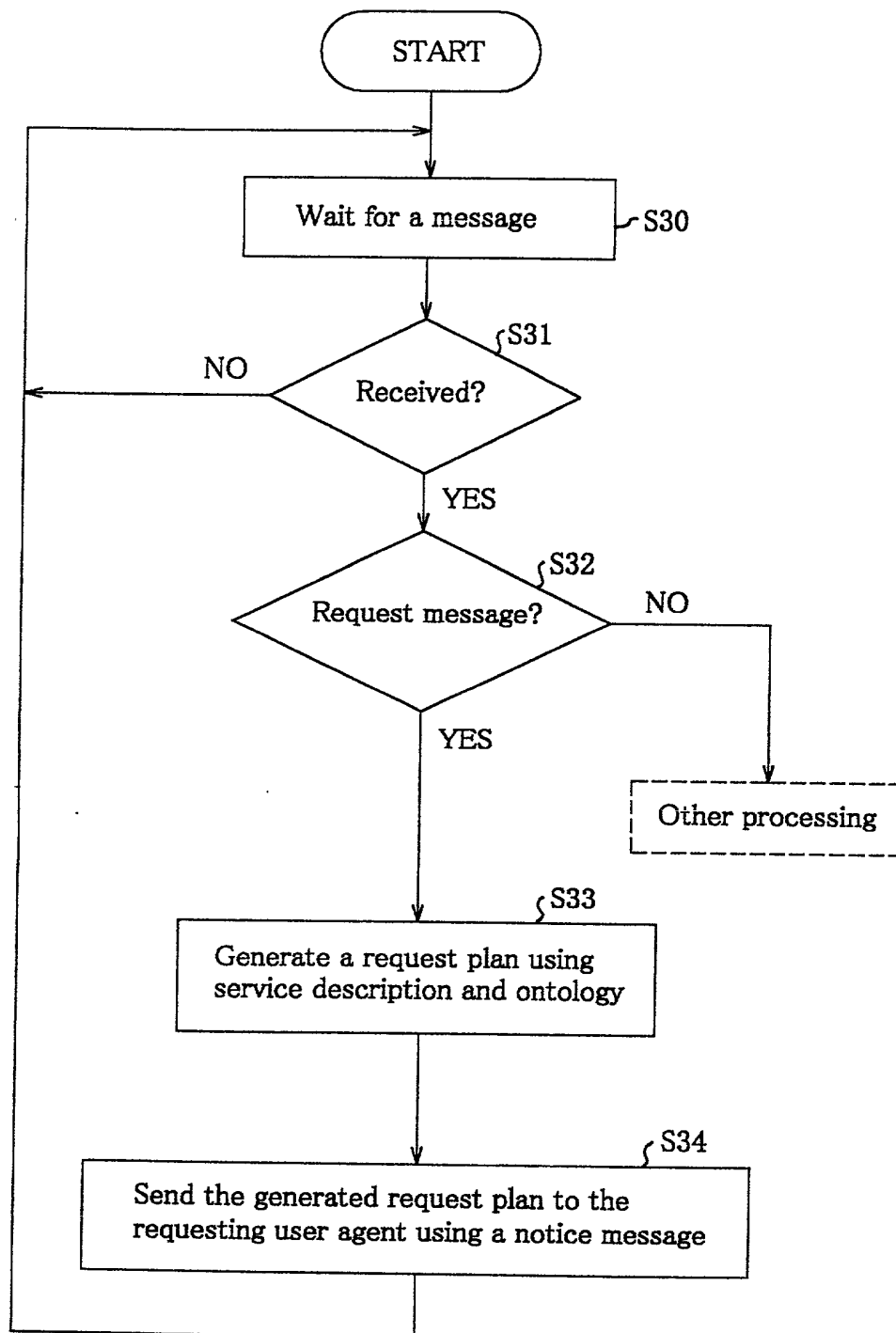


Fig.7

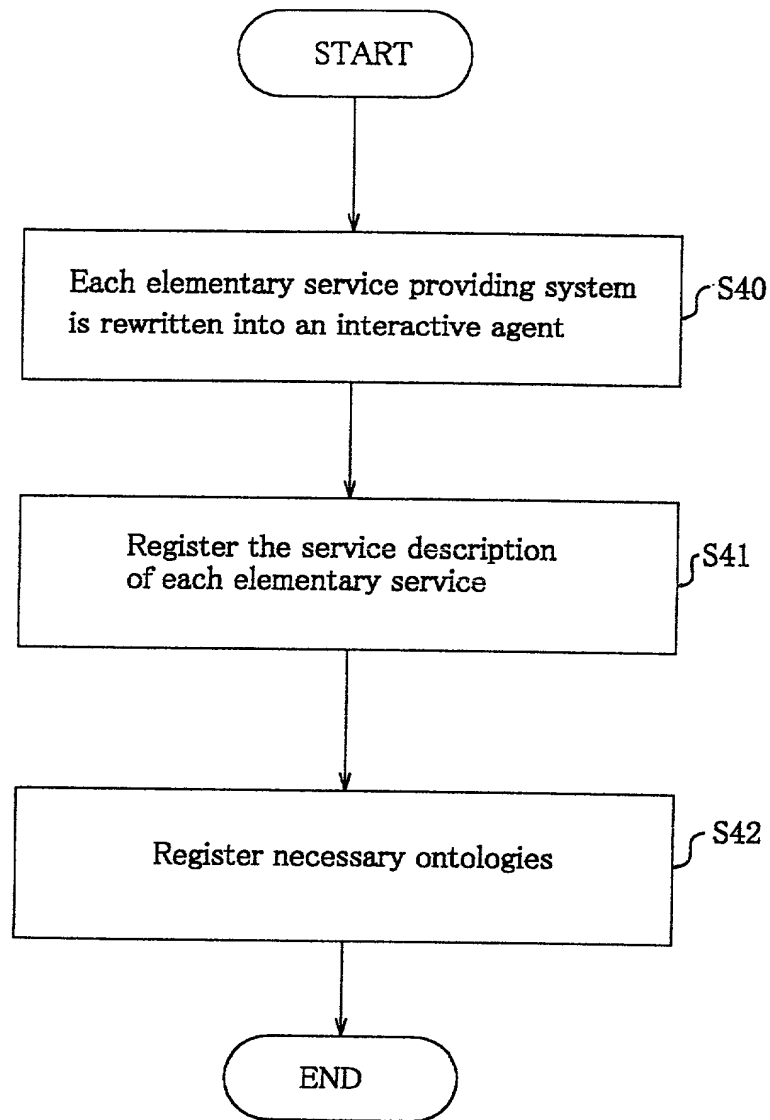


Fig.8

(A) The message transmit/receive section receives the travel reservation message (Equation 17) sent by user agent, and delivered to the message processing engine.



(B) On seeing the contents of message, the message processing engine judges that the message is a travel reservation request, and the request plan generating section generates a request plan as described by Equation 14 using the information in the service description storing section and the ontology storing section.



(C) The message processing engine causes the request plan execution section to send from the transmit/receive section a request message to the external agents (flight-agent, hotel-agent) based on the request plan, and waits for a response.



(D) Upon receipt of "flight reservation" and "hotel reservation" as reply results, the message processing engine assembles a "travel reservation" frame using the information of Equation 12, and returns a reply message to the user agent.

Fig.9

(A)

The message transmit/receive section receives the message (Equation16) for notifying the service description sent from the flight reservation agent, and delivered to the message processing engine.



(B)

On seeing the contents of the received message, the message processing engine judges that the message is the transmission of a service description, and causes the service description to store it in the service description storing section.

Fig.10

(A) The message transmit/receive section receives the travel reservation message (Equation 17) sent from the user agent, and delivered to the message processing engine.



(B) On seeing the contents of the received message, the message processing engine judges that the message is a travel reservation request, and causes the request plan generating section to generate a request plan as described by Equation 14 using the information in the service description storing section and the ontology storing section.



(C) The message processing engine causes the request plan transmission section to send the generated request plan to the user agent via the message transmit/receive section using a notice message.

Fig.11